

## ABSTRACT

5 Semiconductor substrates, particularly metallized substrates such as  
partially processed wafers, are rinsed with an aqueous medium, preferably  
deionized water, which further contains an anti-corrosive chemical agent or  
agents selected so as to minimize corrosion of metals resulting from contact  
with the water. The amount of anti-corrosive chemical agent is maintained in a  
controlled manner at a predetermined level or within a predetermined range  
10 preferably the rinsing with aqueous medium containing anticorrosive chemical  
agent is also carried out for a specified time, followed by further rinsing with  
deionized water alone. The rinsing may be combined, either in the same vessel  
or in a different vessel, with a subsequent drying step, such as a drying process  
utilizing a drying vapor introduced into the rinse tank or into a downstream  
15 vessel. The drying vapor condenses on the surface of the semiconductor  
material and reduces the surface tension of residual process fluid, causing the  
residual process fluid to flow off the surface.